

इंटरनेट

मानक

Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 8568 (1993): Textile machinery and accessories - Pirn winding machines - Vocabulary [TXD 14: Machinery for Fabric Manufacture]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

BLANK PAGE



IS 8568 : 1993
ISO 476 : 1982

भारतीय मानक

वस्त्रादि मशीनरी एवं सहायकांग – पर्न कुंडलन मशीनें –
शब्दावली

(पहला पुनरीक्षण)

Indian Standard

TEXTILE MACHINERY AND ACCESSORIES — PIRN
WINDING MACHINES — VOCABULARY

(First Revision)

UDC 677'053'23 : 001'4

© BIS 1993

BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

October 1993

Price Group 2

NATIONAL FOREWORD

This Indian Standard which is identical with ISO 476-1982 'Textile machinery and accessories — Pirn winding machines — Vocabulary' issued by the International Organization for Standardization (ISO) was adopted by the Bureau of Indian Standards on the recommendation of the Machinery for Fabric Manufacture (Excluding Knitting) Sectional Committee and approval of the Textile Division Council.

In this standard certain terminology and conventions are not identical with those used in Indian Standards; attention is particularly drawn to the following:

Wherever the words 'International Standard' appear, referring to this standard, they should be read as 'Indian Standard'.

In this Indian Standard, the following international standards are referred to. Read in their respective place the following:

<i>International Standard</i>	<i>Indian Standard</i>
ISO 1809, Textile machinery and accessories — Types of formers for yarn packages — Nomenclature	IS 10310 : 1982 Nomenclature for formers for yarn packages (Technically equivalent)
ISO 5238/1, Textile machinery and accessories — Packages for yarns and intermediate products — Part 1 : Terminology	IS 13865 (Part 1) : 1993 Textile machinery and accessories — Packages for yarns and intermediate products : Part 1 Terminology (Identical)
ISO 5239, Textile machinery and accessories — Winding — Basic Terms	IS 13866 : 1993 Textile machinery and accessories — Winding — Basic terms (Identical)

The French, Russian, German and Italian text has been deleted while adopting this International Standard.

Indian Standard

TEXTILE MACHINERY AND ACCESSORIES — PIRN WINDING MACHINES — VOCABULARY (*First Revision*)

0 Introduction

The terms and expressions presented in this International Standard, and such definitions as are included, take into account the development discernible for some years in the field of utilization of automatic pirn winding machines. In effect the majority of pirn winding machines currently used in the textile industry are automatic and use of these is extensive in the production of packages of all types and in certain cases is impinging on the role of the cone or cheese winding machine.

1 Scope and field of application

This International Standard establishes a list of basic terms used in the designation of pirn winding machines and of their accessories as well as certain corresponding definitions, in the field of terminology for weaving preparatory machinery.

NOTE — In addition to terms used in the three official ISO languages (English, French and Russian), this International Standard defines (in an annex) the equivalent terms in German and Italian languages; these have been included for information at the request of Technical Committee ISO/TC 72, and the member bodies for Germany F.R. (DIN), Switzerland (SNV) and Italy (UNI) have verified their correctness. However, only the terms given in the official languages can be considered as ISO terms and definitions.

2 References

ISO 1809, *Textile machinery and accessories — Types of formers for yarn packages — Nomenclature*.

ISO 5238/1, *Textile machinery and accessories — Packages for yarns and intermediate products — Part 1 : Terminology*¹⁾.

ISO 5239, *Textile machinery and accessories — Winding — Basic terms*.

3 General terms and definitions

3.1 pirn winding machine : A machine designed to wind yarn onto pirns for fitting

automatically or otherwise into the shuttle of a weaving machine.

3.1.1 non-automatic pirn winding machine : Pirn winding machine in which the changing of the pirn (replacement of the full pirn by an empty pirn) is done manually (in practice the qualification 'non-automatic' is generally omitted).

3.1.2 semi-automatic pirn winding machine : A pirn winding machine in which the empty pirn is donned manually but the full pirn is doffed automatically.

3.1.3 automatic pirn winding machine : A pirn winding machine in which the changing of the pirn is automatic.

3.2 pirn winding head : A unit assembly on the winding machine which serves for the production of:

— a single pirn (incorporating a single pirn holder or single spindle);

— several pirns simultaneously (incorporating a multiple pirn holder or multiple spindle), for example; a pirn holder with two spindles.

NOTE — In the case of pirn winding at the weaving machine this term designates an attachment on a weaving machine which effects the production of all the pirns used by the weaving machine.

3.2.1 location of the pirn

(for winding of yarn):

— upon a spindle invariably (only on non-automatic machines);

— between locating devices or clamps (with centring elements or similar devices).

3.2.2 feeding the pirn for winding :

— manual;

— by means of an automatic device for transferring the empty pirn from the

1) At present at stage of draft.

waiting position into its winding position. In the case of 'multiple-spindle' mechanisms, the device transfers the number of empty pirns corresponding to the number of winding positions on the head.

3.2.3 device for the formation of the reserve wind or bunch :

- the reserve or bunch at the base of the pirn (towards the machine);
- the reserve or bunch at the tip of the pirn (towards the operator).

3.2.4 device for automatic cutting (of yarn at full pirn) : A device serving to cut the yarn at the pirn changing point on automatic machines.

3.2.5 yarn guide : An element whose function is to ensure, without detriment to the yarn:

- the guidance of the yarn and the application of pressure (tension) to the package;
- the guidance of yarn only (eg : winding with pressure roller).

3.2.6 yarn guide traverse mechanism (single, double or multiple) : A mechanism to impart movement to the yarn guide (imparting to it a displacement as required) by one of the following systems:

3.2.6.1 mechanical;

3.2.6.2 hydraulic;

3.2.6.3 electro-mechanical or electronic.

3.2.7 wind ratio mechanism : A device permitting the setting of the wind ratio.

3.2.8 traverse displacement device : A device for ensuring the displacement of the traverse made by the yarn guide.

NOTE — The function of this device is modified for the production of all other types of package.

4 Additional devices

4.1 yarn tension device : A device to impart to the yarn a suitable tension for obtaining the desired form of package and, to a certain extent, the desired hardness of the wound package.

The principal types are:

4.1.1 gate type;

4.1.2 pinch type;

4.1.3 friction brake (wheel friction driven by the yarn).

NOTE — Tensioners may include the following supplementary devices : yarn clearers, stop motions, tension compensators.

4.2 yarn clearer : A device intended to detect and eliminate yarn faults (slubs, large knots, etc.).

The principal types are based on these systems:

4.2.1 mechanical;

4.2.2 electronic.

4.3 stop motion : Device to stop the winding spindle (or spindles) in the absence of yarn supply by means of:

4.3.1 a mechanical system;

4.3.2 an electronic system.

4.4 tension compensator : A device allowing the tension imparted to the yarn by the tensioner to be maintained constant or to be reduced during the pirn winding operation.

4.5 yarn feeding device : An assembly, free to rotate, and designed to reduce the tendency to "snatch" when unwinding the creel package.

4.6 supply yarn creel

4.6.1 for unwinding overend : Stationary spindles or pegs to hold the supply packages.

4.6.2 for unwinding from the side : Spindles, mandrels or other rotating parts to hold the supply packages.

4.7 measuring device

4.7.1 full pirn stop motion : A device to stop the winding when the pirn attains the pre-determined length. This stop motion can, in certain cases, engage the tip bunching mechanism or the pirn changing mechanism.

4.7.2 pre-determined length counter : A device to stop the winding when the length of yarn wound attains the pre-set value.

4.8 yarn finishing applicator : A device designed to impart to the yarn a particular condition depending upon the use to which it is to be put. The details of the relevant types depend upon whether the finish to be applied to the yarn is in liquid or solid form.

4.8.1 waxing attachment : A device to apply paraffin to the yarn during winding.

4.8.2 applicator roller : A roller to apply lubricating fluid to the yarn during winding.

5 Accessories

5.1 Pirn tray for holding empty pirns

With automatic arrangement of the pirns or otherwise.

5.2 Pirn tray for holding full pirns

With automatic arrangement of the pirns or otherwise.

Standard Mark

The use of the Standard Mark is governed by the provisions of the *Bureau of Indian Standards Act, 1986* and the Rules and Regulations made thereunder. The Standard Mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard under a well defined system of inspection, testing and quality control which is devised and supervised by BIS and operated by the producer. Standard marked products are also continuously checked by BIS for conformity to that standard as a further safeguard. Details of conditions under which a licence for the use of the Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.

Bureau of Indian Standards

BIS is a statutory institution established under the *Bureau of Indian Standards Act, 1986* to promote harmonious development of the activities of standardization, marking and quality certification of goods and attending to connected matters in the country.

Copyright

BIS has the copyright of all its publications. No part of these publications may be reproduced in any form without the prior permission in writing of BIS. This does not preclude the free use, in the course of implementing the standard, of necessary details, such as symbols and sizes, type or grade designations. Enquiries relating to copyright be addressed to the Director (Publications), BIS.

Revision of Indian Standards

Amendments are issued to standards as the need arises on the basis of comments. Standards are also reviewed periodically; a standard along with amendments is reaffirmed when such review indicates that no changes are needed; if the review indicates that changes are needed, it is taken up for revision. Users of Indian Standards should ascertain that they are in possession of the latest amendments or edition by referring to the latest issue of 'BIS Handbook' and 'Standards Monthly Additions'. Comments on this Indian Standard may be sent to BIS giving the following reference:

Doc : No. TX 14 (0235)

Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

BUREAU OF INDIAN STANDARDS

Headquarters:

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110002
Telephones : 331 01 31, 331 13 75

Telegrams : Manaksanstha
(Common to all Offices)

Regional Offices :

	Telephone
Central : Manak Bhavan, 9 Bahadur Shah Zafar Marg NEW DELHI 110002	{ 331 01 31 331 13 75
Eastern : 1/14 C. I. T. Scheme VII M, V. I. P. Road, Maniktola CALCUTTA 700054	{ 37 84 99, 37 85 61 37 86 26, 37 86 62
Northern : SCO 445-446, Sector 35-C, CHANDIGARH 160036	{ 53 38 43, 53 16 40 53 23 84
Southern : C. I. T. Campus, IV Cross Road, MADRAS 600113	{ 235 02 16, 235 04 42 235 15 19, 235 23 15
Western : Manakalaya, E9 MIDC, Marol, Andheri (East) BOMBAY 400093	{ 632 92 95, 632 78 58 632 78 91, 632 78 92
Branches : AHMADABAD. BANGALORE. BHOPAL. BHUBANESHWAR. COIMBATORE. FARIDABAD. GHAZIABAD. GUWAHATI. HYDERABAD. JAIPUR. KANPUR. LUCKNOW. PATNA. THIRUVANANTHAPURAM.	